

SUBMISSION TO THE GOVERNMENT OF CANADA
IN RESPECT OF THE LOCATION OF THE
SECOND INTERNATIONAL AIRPORT
FOR THE TORONTO REGION

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REC'D JUL 27 1972	
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PROVINCE OF ONTARIO
APRIL, 1970

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I. Introduction

The Government of Ontario regards the choice of a site for a second international airport within the Toronto Region as a vital element in the future growth of the region and all of southwestern Ontario. This Government has been pleased to participate in the technical evaluation of the numerous choices for this air terminal. We recognize the difficulties inherent in such a study process particularly as the time available for all components of the research was somewhat restricted.

It has been obvious from the outset that the responsibility for the location of this facility is constitutionally vested with the Federal government, the impact of such a federal decision, however, rests heavily on areas well within the Province's concern. This mutual concern was recognized early on in the study procedure and thus a number of joint studies were planned.

Four areas of primary concern to the Province were immediately identifiable:

- (a) the provision of ground transportation services;
- (b) the provision of all municipal (hard) services within the area affected by the location of the airport;
- (c) the control of the municipal structure and the municipal plans in areas surrounding all potential



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sites; and

- (d) the planning of the regional structure and control of the growth of the Toronto-Centered region.

It has been the view of the Government of Ontario that the selection of a specific site depends ultimately upon the abilities of the optional sites to satisfy three broad categories of criteria. These being to achieve:

- (i) efficient, safe, technical operations of the airport facility to aid in the economic performance of the aviation activities in Canada and Ontario;
- (ii) optimum economic benefits of the investment of the entire airport complex and its associated development;
- (iii) the optimum level of compatability with the regional development planning framework that is currently being advocated for the Toronto-Centered region.

The matter of public capital investment and yearly operating costs are indeed critical factors. These costs are composed not only of the airport per se, but include the public costs of the ground transportation system and those costs incurred as a result of the associated urban development. Substantial consideration has also been given to the private costs incurred in the alternative locations. The total costs of the complex are shown to vary by location, and it is these cost differences that have been applied against the non-quantifiable benefits or costs of each particular location.

It has not been possible to precisely estimate the

total array of costs. This fact has presented certain analytical problems which have largely been overcome through a reasonably rigorous analysis; however it cannot be denied that the inability to be precise in all matters where quantification was required places a large burden of judgement on those required to make this decision.

The Government of Ontario through its participation in all phases of the above-mentioned analysis has expended considerable effort and research into both the selection of the airport site in particular; and in the overall social and economic development of the region in general. Therefore it is urged that the Government of Canada give substantial consideration to the views and suggestions made in this submission.

II. Basic Assumptions Inherent in the Provincial Evaluation

It should be stressed at the outset that there are certain basic assumptions inherent in the evaluation of the potential sites by the Government of Ontario. These assumptions must, by their nature, condition any conclusions or recommendations derived from the analysis previously conducted. These assumptions are:

- (i) that the allocation of investment among the various modes of transport is taken as given. That is the role that air transport will occupy in the future transportation system is to remain constant and will not be altered by major immediate technological changes and that large diversions of traffic will occur benefitting the inter-city ground transportation. This particular element is apt to vary significantly within the next two decades and is therefore a vital assumption.
- (ii) that a second major airport will be constructed in a site remote from the present facility located in Malton and further that the choices for the location of the second airport are limited to those four sites that have been subjected to clinical study. This assumption states that for social and environmental reasons it is not possible to expand the current facilities at the present site (Malton) so as to accommodate the future requirements of the region.
- (iii) that the airport facility as proposed will be open to public use no earlier than 1976 and no later than 1982.

III. A Summary of the Study Process

The study program involved in the evaluation has been as follows:

- (1) the Federal planning team identified all possible sites within the Toronto-Centered region. This identification only involved a test of the ability of aircraft to operate into and out of the potential site. (That is, the site was required to be functional as an airport.)
- (2) the Provincial and Federal staffs then jointly evaluated these sites in order to reduce the number of potential sites to a manageable level for clinical evaluation - this resulted in the selection of four primary sites
 - (a) Lake Simcoe
 - (b) Lake Scugog
 - (c) Campbellville
 - (d) Orangeville
- (3) these four sites were each subjected to a clinical analysis in which the primary purpose was to produce a technical analysis of, and quantification of, the major costs embodied in each site. The clinical analysis consisted of four major specific studies:
 - (1) identification of the required ground transportation systems and the cost involved in each of the four primary sites;
 - (2) a study of the land economics and the potential viability of each of the four sites for a Federal land management program;
 - (3) a land-use planning study to detail the highest and best use of each of the four primary sites. This study was to produce a land-use plan for each primary site;
 - (4) an economic impact study to outline the overall economic impact of each of the primary sites and to set each site in the framework of the larger region as a whole.

The first three of these studies were commissioned to various consultants and the latter was undertaken by the Provincial government and has been carried out by Dr. Gerald Hodge in conjunction with the Regional Development Branch. All of these studies have been completed and form an integral part of the Ontario government's evaluation. None of these studies were required to provide conclusions or recommendations for any particular site but only to provide a detailed data analysis of each site's potential on which such an evaluation could be made.

The critical stage of the selection process was encountered in the establishment and evaluation of the site selection criteria and the weighting of these criteria. It should be obvious that the process of weighting the various criteria is most critical to the determination of the final site recommendation. This process was carried out to a large degree by a joint federal-provincial technical committee established for that purpose. The aforementioned studies provided, together with other information, the data base for this evaluation stage. This evaluation process attempted to take into consideration as many aspects of the environmental and regional economic and population distributions as possible. The Government of Ontario feels that it is most important to integrate the airport site selection process with the regional planning program of the Province

of Ontario.

In order to accomplish the above the following goals, objectives and criteria were established to be used in the evaluation stage.

IV. Goals, Objectives and Criteria

The following paragraphs set out the goals, objectives and criteria that were developed by a joint Federal-Provincial technical committee for the purposes of site selection and site evaluation.

Objective A entailed a detailed examination of the costs involved in each site. These costs were separated into (i) capital, (ii) operating costs (both government costs) and public costs. This latter category was further separated into (i) monetary costs associated with both users and residents of the associated urban complex and (ii) non-monetary cost in the form of users' time. There has been no criteria established for Objective 'A' as these factors were in most cases quantifiable and therefore the desired result was determined through additions deriving the optimum cost in this manner.

Goal: To select the optimum location for a second major Toronto airport with due regard to safe and efficient airport operations, long-range planning objectives, social/environmental effects and costs.

Objective A: To minimize the aggregate net costs as compared to benefits of the airport and its associated complex.

Objective B: To minimize the social and environmental dis-benefits of the airport.

Objective C: To maximize airport operating efficiency.

OBJECTIVE B:

Criteria 1. Regional Planning Effect

The airport, as defined, must conform to and assist in the implementation of the overall development concept for the region.

Standards:

1. Develop a well-structured urban corridor along the Lake Ontario shore from Bowmanville to Hamilton. (Zone 1)
2. Develop a nodalized urban axis in the commutershed (Zone 2) north of Metropolitan Toronto.
3. On either side of this axis, i.e., in the northwest and northeast districts of the commutershed, adopt a policy of retaining the land for agriculture, recreation and conservation. Focus limited growth on existing communities. (Zone 2)
4. In the peripheral zone (Zone 3) develop urban nodes of significant size at Barrie and Midland in the North Simcoe district and another at or in the vicinity of Port Hope-Cobourg. This reflects the policy of beginning decentralization of excessive growth pressure in Metropolitan Toronto.
5. Also in the peripheral zone, determine the role of the Kitchener-Waterloo-Guelph-Galt urban cluster and resolve the physical development constraints.
6. Maintain the Georgian Bay coast, Lake Simcoe, the Kawartha Lakes and the Niagara Escarpment as regional recreation areas along with the valley systems of the commutershed.
7. Adopt transportation policies that will stimulate as well as serve the proposed Development Concept.

Criteria 2. Disruption of Cultural Patterns and Life Styles

Standards:

- (a) Degree of physical interference within airport site and noiseland.

Number of non-farm residential units displaced.

Number of farm units displaced.

Number of seasonal units displaced.

Number of recreational facilities displaced.

- (b) Severance of cohesive community structure

- number of people who will suffer a loss of community facilities (i.e., schools, hospitals etc.)

- (c) Degree of disruption of social patterns - patterns caused by barrier effect of airport

- subjective evaluation of social disruption

- (d) Degree of destruction to areas of high scenic value

- subjective evaluation of landscape features.

Criteria 3. Minimize the Harmful Effects of Pollution

Standards:

- (a) Noise effects

- number of people with 100 GNR

- number of people adjacent to noiseland at present.

- (b) Air pollution

- number of people within an area where maximum anticipated levels of pollution in ppm is likely to be exceeded.

Criteria 4. Ecological Effects

The degree of physical interference with natural habitats and resultant damage to living organisms and to the balance of dependent biological systems within the areas to be acquired.

Within these areas the ecological effects may be ascertained in terms of:

- (a) Degree of destruction or damage to areas of unique or unusual ecological structure.
- (b) Degree of destruction or damage to unique or unusual species.
- (c) Loss of general capability to support wildlife.
- (d) Loss of general capability to support natural vegetation (including forests).
- (e) Degree of susceptibility to soil erosion damage.

V. Summary of the Consultants' Reports

(a) Transportation System (Ground)

The consultants examined the four alternative sites to determine the feasibility of servicing each of them with adequate ground transportation service.

The primary conclusions of this report are found in the cost tables presented later in this report. That is the conclusions are reflected in the cost estimates of

- (i) Primary Capital Costs - regional ground transportation systems costs
- (ii) Primary Operating Costs - ground transportation operating and maintenance
- (iii) Private Operating Costs - airport user vehicle operating costs
- airport user time costs.

The services to each site are to include a rapid transit facility and a major expressway. The costs presented reflect the additional transportation services required for each site over and above those financial requirements already planned by the Province of Ontario. The figures presented include the cost of capital to the Provincial Government of accelerating a number of highway development programs and therefore accelerating the overall capital requirements of the Government of the Province.

(b) Land Use Plan Study

This study developed recommended land use plans for the noise land inherent in each of the alternative sites. It

also contained a detailed evaluation of the disruptive, ecological and pollution effects that an airport would have on these noise lands.

Site A - The noise lands involved six townships including 93 per cent of North Gwillimbury Township; 5,414 permanent residents and 18,000 seasonal residents would be affected, thus disrupting substantial amounts of recreational land. This function is extremely important to the region and thus involves substantial destructive features.

Site B - The noise lands involved five townships including 91 per cent and 77 per cent of Scugog and Cartwright Townships respectively; 4,751 permanent residents exist within the noiseland, however no major communities would have to be relocated. There are minimal disruptive effects to this site from an ecological and social viewpoint.

Site C - The noise lands involved 78 per cent of Nassagaweya Township and 45 per cent of Eramosa Township; 5,551 permanent residents would be affected by this site. The disruptive effects of this site were fairly high; however there is little recreational value to this site except for the possibility of

that area that touches the Niagara Escarpment.

Site D - The noise lands involved nine townships, however 78 per cent of Amaranth is included with the site boundaries. Site D contains the lowest number of persons within the noise land, i.e., 3,957 persons would be affected. This site has the least disruptive effects of any of the four.

The following table presents in graphic form the major findings of this report.

Table 1

Summary of Survey, Analysis and Proposed Land Use

Site	Existing Population in Noise Lands	Existing Population in Airport	Total Existing Population	Land Area in Acres	Water Area in Acres	Total Site Acreage	Acres of Class 1 Agricultural Land	Acres of Significant Recreational Land (1)	Acres of Class 1 Industrial Land	Acres of Class 2 Industrial Land	Acres of Proposed Industrial Land Use to Year 2000	Acres of Proposed Travel, Hotel & Related Land Use to Year 2000	Acres of Proposed Other Commercial Land Use to Year 2000 (5)	Acres of Proposed Agricultural Holding Land Use to Year 2000	Acres of Proposed Agricultural Land Use to Year 2000	Acres of Proposed Agricultural & Recreational Land Use to Year 2000	Acres of Proposed Open Space & Recreational Land Use to Year 2000
A	3,797 ⁽²⁾	1,617	5,414	56,000	26,800	82,800	16,500	8,200	5,700	5,000	305	40	15	11,300	15,500	11,400	17,440
B	3,810 ⁽³⁾	941	4,751	73,700	9,100	82,800	37,900	5,100	7,800	-	525	55 ⁽⁴⁾	10	8,800	30,300	16,300	17,710
C	4,945	606	5,551	82,800	-	82,800	19,800	6,900	3,000	20,400	555	70	20	20,200	29,000	4,200	28,755
D	3,358	599	3,957	82,800	-	82,800	32,700	1,100	2,000	-	575	30	10	800	50,100	10,100	21,185

(1) Class 1-5 Recreational Capability and wetlands, or lowlands that could be integrated into an open space or landscape system.

(2) In addition, summer population is estimated at 18,000 persons.

(3) In addition, summer population is estimated at 800 persons.

(4) Travel, Hotel & Related uses have been assigned to a location near the interchange of the airport freeway and the Regional freeway. In Site B, this interchange would probably be located outside the Noise Lands as shown on Figure 4.

(5) Acres of other commercial land uses allocated (February 24, 1970) after servicing calculations had been prepared.

(c) The Land Economics Study

This study was undertaken to provide a financial feasibility analysis for each of the alternative sites. The conclusions of this report can be found in the cost tables shown below. The specific elements of cost acquired from this study were the

(i) land acquisition costs

(ii) noise lands management costs.

It was found that site C had the greatest ability to earn a financial return and in fact this was the only site among all of the alternatives that had the potential of earning a positive return; even though this site had the second highest acquisition costs.

This study also detailed the impact differences to be expected in each site due to the historical trends analysis versus a regional goals planning analysis. The radical difference in these two viewpoints is expressed in the population forecast for site C and D under both alternatives.

Population Projections

<u>Site</u>	<u>Historical Trends Analysis</u>	<u>Regional Goals Planning Analysis</u>
C	436,000	160,000
D	10,700	110,000

D. Regional and Economic Impact Study

This study concluded that the associated airport complex

would contain a community of approximately 128,000 to 142,000 people by the year 1990. The required overall capital investment in this associated complex will range from between 2.6 and 2.8 billion dollars. It is concluded however that the airport will not "act as a multiplier on regional population", nor should it be an accelerator of this population. The same situation prevails with respect of any labour force multiplier. In respect of capital investment while it is expected that there will be no multiplier effect, there is likely to be a strong accelerator effect, this would come about due to the scale of capital needed for this project. In addition it can be expected that some transformation could occur in this capital investment.

The report concludes that the second airport is unlikely to stimulate any additional income flow in the region, however it will have some income effect on the local impact area. Additional conclusions are - no overall expansion in the total region's economy can be expected from Toronto II and no change in the structure of economic development for the region should result from the advent of Toronto II.

The major conclusion of this study was that the presence of Toronto II airport will have a strong impact on the spatial structure depending upon where it is located in the region. The following table summarizes the impact on the spatial aspects of the region.

TABLE 12

SUMMARY OF POSSIBLE IMPACT ON
REGIONAL PATTERNS AND POLICY OF TORONTO II

<u>AIRPORT LOCATION</u>	<u>REGIONAL PATTERN</u>	<u>POSSIBLE IMPACT ON</u>	<u>REGIONAL POLICY</u>
Site A.	- Reinforces the "development corridor" on North Yonge; reduces Lake Simcoe recreation area; coincides with Aurora/Newmarket growth nodes.	- Promotes growth toward North Simcoe and enhances accessibility of latter region; water resources of Lake Simcoe will come into contention; conflicts with agriculture, recreation and Indian Reserve with airport complex.	
Site B.	- Reinforces the "development corridor" on 401 east; coincides with growth tendencies of Oshawa node.	- Gives a development thrust toward Lake Ontario Region through Port Hope-Cobourg; areas to west of Toronto have airport accessibility reduced.	
Site C.	- Could create another "development corridor" along Highway 7 west parallel to the Lakeshore; many small centres could dissipate growth; Niagara Escarpment could be affected.	- Reinforces the already established growth of the Kitchener-Waterloo area; associated urban development east of the site could be difficult to control.	
Site D.	- Would divert some regional population growth to underdeveloped sector; could spawn a "development corridor" on Highway 10 north; Niagara Escarpment could be affected	- Creates a strong northwest node to foster links with Georgian Bay and the south; linking of Kitchener area with North Simcoe would be facilitated; large-scale development will require substantial planning and guidance.	

VI. Cost Implications of Alternative Sites

The following tables detail the economic cost estimates inherent in each site alternative. The cost elements have been separated between those costs paid by governments and those costs paid by users or the general public.

On the basis of the former, sites B, C and D show no significant differences in the total primary costs between each site. However in terms of user or general public costs site C is substantially below the other sites. The difference of \$1.5 billion represents a significant difference. However it should be pointed out that the measurement of these costs in a precise manner is somewhat difficult and therefore it is appropriate that these costs be considered as somewhat different than the primary cost and thus they (primary and general public costs) are not additive.

PRIMARY CAPITAL COSTS

All figures in (000's)

COST FACTOR	SITE			
	A	B	C	D
LAND ACQUISITION	228,820	116,608	174,204	90,159
AIRPORT AND SUPPORT FACILITIES	196,000	252,000	231,000	204,000
SUB TOTAL	424,820	368,608	405,204	294,159
REGIONAL TRANSPORTATION SYSTEMS	205,200	191,300	160,800	220,500
REGIONAL SERVICES SYSTEMS	82,306	49,560	98,786	115,426
SUB TOTAL	287,506	240,860	259,586	335,926
TOTAL	712,326	609,468	664,790	630,085

PRIMARY OPERATING COSTS

All figures in (000's)

COST FACTOR	SITE			
	A	B	C	D
NOISE LANDS MANAGEMENT	32,686	7,800	1,432	17,840
AIRPORT OPERATION AND MAINTENANCE	6,000	5,000	3,250	6,000
SUB TOTAL	38,686	12,800	4,682	23,840
GROUND TRANSPORTATION OPERATING AND MAINTENANCE	85,560	84,120	73,730	83,450
SERVICING FACILITIES OPERATING AND MAINTENANCE	---	---	---	---
SUB TOTAL	85,560	84,120	73,730	83,450
TOTAL	124,246	96,920	78,412	107,290

PUBLIC CAPITAL COSTS

All figures in (000's)

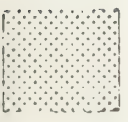
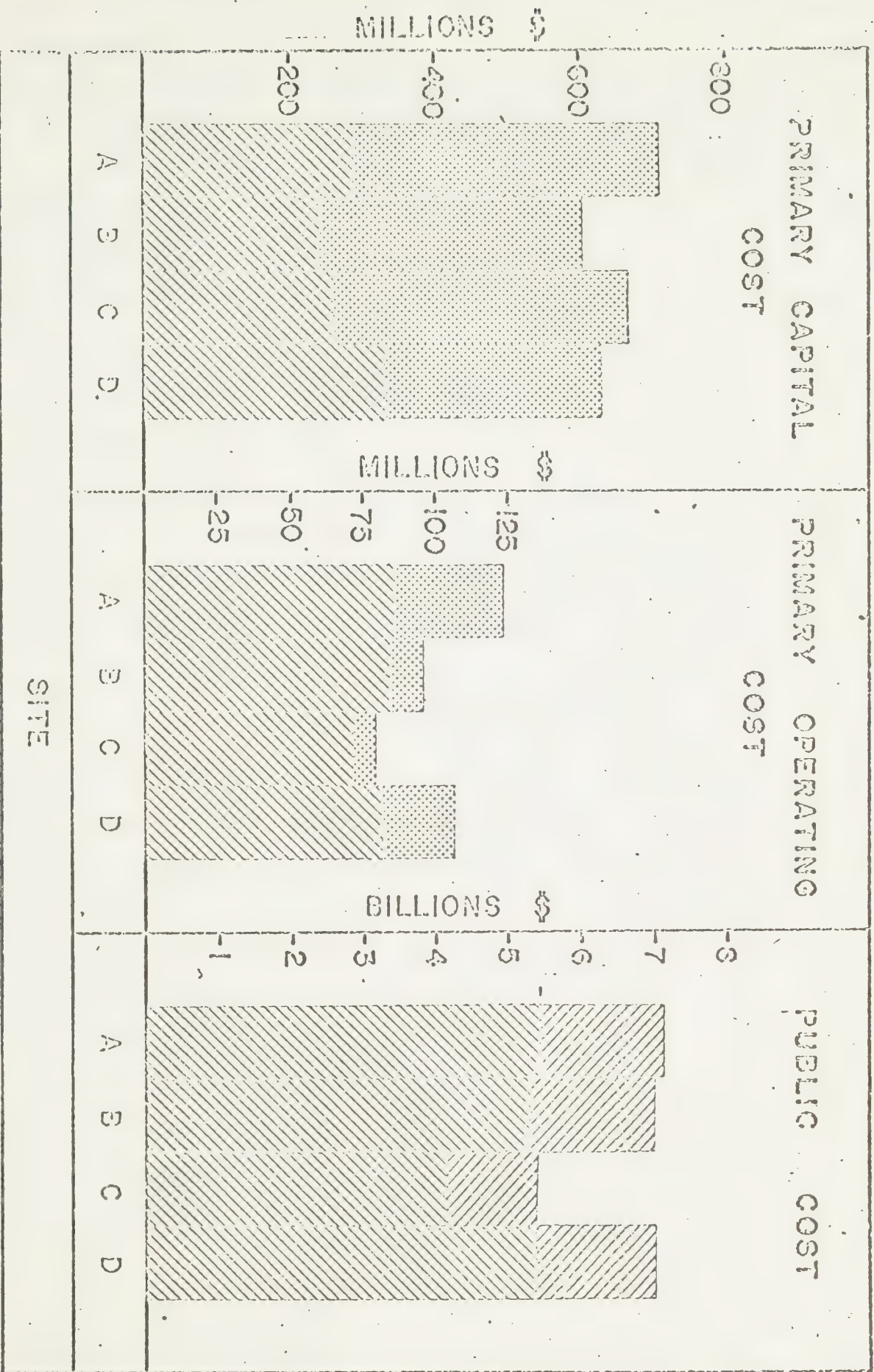
COST FACTOR	SITE			
	A	B	C	D
ASSOCIATED DEVELOPMENT COST	1,719,900	1,632,600	1,526,800	1,719,000

PUBLIC OPERATING COSTS

COST FACTOR	SITE			
	A	B	C	D
AIRPORT USER VEHICLE OPERATING COST	3,734,900	3,692,200	2,635,400	3,661,900

COST FACTOR	SITE			
	A	B	C	D
AIRPORT USER TIME COST	1,696,500	1,707,400	1,252,200	1,676,100

COMPARATING SITE ANALYSIS



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VII. Evaluation of Alternative Sites as They Affect the Environment and the Regional Planning Process

It was recognized early on in the study process that the cost criteria alone were not a sufficient basis on which to select an optimum airport site. Thus the technical planning team has given substantial and serious concern to the environmental effects of locating an airport at each of the alternative sites. Also prime consideration must be given to integrating the airport site location with the long-term planning objectives of the whole region.

It was concluded by the technical planning team that with the exception of site A, the differences among the alternative sites were extremely marginal with site B having slightly less disruptive and ecological influences due to the lack of any significant urban centers within the noise lands and the absence of potential recreational features such as the Niagara Escarpment. Site A, on the other hand, presented significant destructive influences and was particularly harmful to the recreational potential of the Toronto region.

Effects on the Long-Term Planning of the Region

Objective B of the site evaluation criteria stressed the importance of integration of the airport site with the current long-term development concept for the Toronto-Centered region. The measures against which such a

determination could be made were set out in the "standards" associated with this criteria. It has been recognized by all levels of government and by most economists and planners that there are major social and economic advantages to be obtained through the structured formulation of a region's growth. These benefits while largely unquantifiable in monetary terms are nevertheless real and highly significant in terms of benefits to society.

The standards set out for Criteria 1 of Objective B reflect most adequately the basis of the long-term development concept for the region in which the airport will be placed. If each of the sites is evaluated in terms of its ability to integrate and co-ordinate with this development concept, the following is the general conclusion.

Conformity with the Long-Term Planning Concept for the Region

Site A

SITE A: This site and its associated development would promote growth in the urban axis as recommended, by the development concept, to the north of Metropolitan Toronto. It would also provide some stimulus in the Barrie, Midland area, though the position of Site A on Lake Simcoe makes its benefits to the Region and to the development concept somewhat limited. The water resource of Lake Simcoe, is a key element in the possible development of the airport

complex at Site A. The best use of this resource should be determined with the development of both the Toronto region and the northern region in mind. Within the region, the main disadvantage of this site is the conflicts that it presents with agricultural, recreational potential of the area, the Indian Reserve lands, and of Lake Simcoe itself. While this site has some ability to assist and co-ordinate some elements of the development concept, it is not without substantial conflicts both from a user point of view and a development point of view. The site could not be considered favourably in light of the standards and criteria established for objective B.

Site B

SITE B: Growth of the Toronto region tends to be westward and has not proceeded much beyond Oshawa to the east. Little or no integration of development has occurred with the Lake Ontario Region (i.e., east of Metropolitan Toronto-Oshawa area) adding to the latter region's isolation. With this airport located at Site B, a strong development thrust would be given to the eastern conurbation, extending to Port Hope and Cobourg. This conforms extremely well with the long-term Development Concept for the region. The main disadvantage is that passenger markets are west of Toronto and their accessibility to the new airport would be reduced. Terminal planning and connecting transportation

will be the key to resolving the latter problem.

This site has the benefit of not only providing the development thrust but also of anchoring the eastern portion of the lakeshore corridor development. The site presents little or no problems from an environmental and ecological point of view. The site integrates well with the development concept and many of the significant benefits of the concept planning could be realized by the development of this site.

Site C

SITE C: This site is situated between the fast-growing Kitchener-Waterloo district and the outward-thrusting Metro Toronto center. The Development Concept seeks a double-tiered arrangement of cities along Lake Ontario, little development along the Georgetown, Acton, Guelph axis, and constrained development in the Kitchener-Waterloo area. The main advantage of the high density lakeshore concept is its ability to create a multiple use, economic, high service level transit system to serve at least cost all of the lakeshore cities. The development constraints on Kitchener-Waterloo-Guelph-Galt stem from high servicing costs. The adoption of Site C would tend (i) to put pressure on development along the 401 axis, at the expense of and detracting from the lakeshore urban corridor, making the provision of transit less efficient, and forcing

higher servicing costs for the entire range of cities if these are moved onto the 401 axis; (ii) the adoption of this site would create high development pressures on areas which presently exhibit high development and high social costs; (iii) it would accelerate growth pressures in areas where existing high rates of growth are already generating community housing and other social problems; (iv) this airport location is not consistent with the provincial strategy at stimulating northward and eastward development, and therefore acts against future provincial inter-regional balance. The selection of this site would entail considerable adjustment to the present development concept and thus would place some pressure on the development of the western lakeshore corridor. On balance, the site has significant negative effects for the Development Concept and also entails the highest degree of social disruption.

Site D

SITE D: An airport complex at Site D could serve as an important "fulcrum" between several regions whose transport and economic integration might otherwise prove to be extremely difficult to achieve. It would create a strong node on the northwest periphery of the Toronto region which could foster connections with the region beyond - Owen Sound, Collingwood, Bruce Peninsula - for both economic and recreational activities. This site does not

provide the negative aspects of site C from a development concept point of view - and in addition the consultants' reports have shown that it has the least disruptive effects from a social and environmental point of view of any of the alternative sites.

Evaluation and Requirement for Policy Resolution

The technical evaluation of each of the alternative sites indicated:

- (1) that there are no significant differences between site B, C, and D from the point of view of cost to the various levels of government; although the jurisdictional split does produce some significant differences.
- (2) that site C showed substantial advantage in respect of costs to the users of the air terminal. The approximate magnitude of this advantage was 1 billion dollars over 30 years.
- (3) that there are no significant differences between sites B, C, and D from the point of view of social, ecological and environmental disruption. Site C is, however, the poorest among the three in respect of this criteria.
- (4) that sites B and D reflect the strongest and highest level of benefits and co-ordination with the current long range development concept for the region. Site C presents some significant disadvantages in terms of implementation of this development concept.

The technical team engaged in the evaluation process conducted a sensitivity test among the various criteria. These tests placed various weights upon each of the criteria, the weights were then varied so that the importance of the cost criteria varied from maximum to minimum and alternatively the environmental and long range planning criteria ranged from minimum to maximum. This analysis showed, in every case, that the results were sensitive, (in other words, the resulting optimum site changed from one to another), depending upon the relative weight that was

given to the user cost elements versus the conformity with the development concept element.

The operative trade-off in the evaluation process then is the importance that is assigned to the users' additional time and money cost as opposed to the importance of maintaining in a reasonably viable form the long range development concept. The technical evaluation has shown that one is a cost of the other and that the benefits inherent in one option will be lost or at least degraded if the other option is chosen.

The choice among the above two important factors is not one of a technical nature but requires a policy decision.

Thus, the choice of the optimal site will depend totally upon the relative importance given to each of the above factors.



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